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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/808,392

03/25/2004

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1713.1012

5082

21171 7590 06/13/2008

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EXAMINER

NADKARNI, SARVESH J

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

06/13/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/808,392	<b>Applicant(s)</b> FUJITA ET AL.	
	<b>Examiner</b> SARVESH J. NADKARNI	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-10, 24 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-23 and 25-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

**This Office Action is in response to the Amendment filed September, 28 2007, in relation to Application Number: 10/808,392 (hereinafter referred to as “amendment”). In accordance with the Response to Restriction Requirement filed on January 17, 2008, claims 1-10, 24 and 35 have been withdrawn from consideration. No claims have been cancelled or newly added. Claims 14-19 and 22-23 have been amended. Therefore, claims 11-13, 14-23 and 25-34 are currently pending.**

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-19, and 25-30 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman (US 2004/0042547 A1) hereinafter referred to as “Coleman” and further in view of Lupu (US 6,721,950 B1) hereinafter referred to as “Lupu”.

3. Regarding claim 11, Coleman clearly teaches **an image transmission apparatus** (see at least Coleman Abstract describing transmission apparatus) **that transmits an image to an information processing apparatus** (see FIG. 1A describing element 103 further described at least at paragraphs [0112]-[0114]) **connected to a predetermined network** (see at least FIGs. 1A illustrating element 127, further described at least pages 8-9 at paragraphs [0114]-[0115]), **the image transmission apparatus comprising: an information acquiring unit that acquires**

**cursor location information from the information processing apparatus** (see page 2, paragraph [0017] and further described at page 13 paragraph [0163]); **an image extracting unit** (see FIG. 4, element 401 and 221 further described at page 10 paragraph [0124]) **that extracts a cursor peripheral image** (see page 2, paragraph [0017] and further described at page 13 paragraphs [0162] and [0163] and FIG. 7B) **from an image storing unit that stores the image to be transmitted to the information processing unit** (see FIG 4 element 402, frame buffer further described at page 10 paragraph [0124]), **based on the cursor location information acquired by the information acquiring unit** (see page 2, paragraph [0017] and further described at page 13 paragraph [0163]); **and a cursor image transmitting unit that transmits the cursor peripheral image, extracted by the image extracting unit, to the information processing apparatus** (see page 10 paragraph [0132], compression device 229 implements send compressed message block 415 and compressed message block 415 sends compressed data to controlling computer).

4. Coleman does not explicitly teach **acquiring cursor location information from the remote-control computer** and **extracting a cursor peripheral image from an image storing unit**.

5. In the same field of endeavor, Lupu '950 teaches **acquiring cursor location information from the remote-control computer** (see Lupu '950 column 3, lines 3-25) and **extracting a cursor peripheral image from the computer** (see Lupu '950 column 3, lines 26-34).

6. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate the cursor acquisition system of Lupu

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'950 into the image transmission apparatus of Coleman because it would improve network efficiency (see Coleman page 2, paragraph [0017]).

7. Regarding claim 14, Coleman in view of Lupu clearly teaches **a method of transmitting an image** (see at least Coleman Abstract describing transmission) **to an information processing apparatus** (see Coleman FIG. 1A describing element 103 further described at least at paragraphs [0112]-[0114]) **connected to a predetermined network** (see Coleman at least FIGs. 1A illustrating element 127, further described at least pages 8-9 at paragraphs [0114]-[0115]), **comprising: acquiring cursor location information from the information processing apparatus** (see Coleman page 2, paragraph [0017] and further described at page 13 paragraph [0163] and further see Lupu '950 column 3, lines 3-25); **extracting a cursor peripheral image** (see Coleman FIG. 4, element 401 and 221 further described at page 10 paragraph [0124] and see page 2, paragraph [0017] and further described at page 13 paragraphs [0162] and [0163] and FIG. 7B and further Lupu '950 column 3, lines 26-34) **from an image storing unit that stores the image to be transmitted to the information processing apparatus** (see Coleman FIG 4 element 402, frame buffer further described at page 10 paragraph [0124]), **based on the cursor location information acquired in the acquiring of the cursor location information** (see Coleman page 2, paragraph [0017] and further described at page 13 paragraph [0163]); **and transmitting the cursor peripheral image, extracted in the extracting of the cursor peripheral image, to the information processing apparatus** (see Coleman page 10 paragraph [0132], compression device 229 implements send compressed message block 415 and compressed message block 415 sends compressed data to controlling computer).

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8. Regarding claim 25, Coleman in view of Lupu clearly teaches **an image transmitting program product for operating a computer that transmits an image** (see at least Coleman Abstract describing transmission) **to an information processing apparatus** (see Coleman FIG. 1A describing element 103 further described at least at paragraphs [0112]-[0114]) **connected to a predetermined network** (see Coleman at least FIGs. 1A illustrating element 127, further described at least pages 8-9 at paragraphs [0114]-[0115]), **the image transmitting program product causing the computer to function as: an information acquiring unit that acquires cursor location information from the information processing apparatus** (see Coleman page 2, paragraph [0017] and further described at page 13 paragraph [0163] and further see Lupu '950 column 3, lines 3-25); **an image extracting unit that extracts a cursor peripheral image** (see Coleman FIG. 4, element 401 and 221 further described at page 10 paragraph [0124] and see page 2, paragraph [0017] and further described at page 13 paragraphs [0162] and [0163] and FIG. 7B and further Lupu '950 column 3, lines 26-34) **from an image storing unit that stores the image to be transmitted to the information processing apparatus** (see Coleman FIG 4 element 402, frame buffer further described at page 10 paragraph [0124]), **based on the cursor location information acquired by the information acquiring unit** (see Coleman page 2, paragraph [0017] and further described at page 13 paragraph [0163]); **and a cursor image transmitting unit that transmits the cursor peripheral image, extracted by the image extracting unit, to the information processing apparatus** (see Coleman page 10 paragraph [0132], compression device 229 implements send compressed message block 415 and compressed message block 415 sends compressed data to controlling computer).

9. Regarding claim 12, Coleman in view of Lupu clearly teaches **the image transmission apparatus as claimed in claim 11** (see above), **wherein the image extracting unit detects an image change from a difference between a first image to be transmitted to the information processing apparatus** (see Coleman, page 5 paragraph [0061] “current frame buffer”) **and a second image to be transmitted after the first image** (see Coleman paragraph [0061] “compare frame buffer”), **and extracts a predetermined region that includes the changed portion of the second image with respect to the first image** (see Coleman, page 5, paragraph [0059] through page 6 paragraph [0065]).

10. Regarding claim 13, Coleman in view of Lupu clearly teaches **the image transmission apparatus as claimed in claim 11** (see above), **further comprising an image transmitting unit that transmits a general image to the information processing apparatus** (see Coleman, FIG. 9, further described in page 13, paragraph [0171] continued at page 14 through paragraph [0177]), **the cache memory provides imaging until updateable data detected), wherein, when the cursor location information is acquired from the information processing apparatus, the image transmitting unit stops transmitting the general image to the information processing apparatus** (see Coleman FIG. 9, the image processing waits until cache is updated to resume; see page 14 paragraph [0177]), **and, after the cursor peripheral image is transmitted by the cursor image transmitting unit** (see Coleman, page 14, paragraph [0173], merge frame buffer is updated with any changed or new data), **the image transmitting unit resumes transmitting the general image to the information processing apparatus** (see Coleman, page 14 paragraph [0177], the cycle resumes with additional frames).

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11. Regarding claim 15, it is the equivalent method variant of apparatus claim 12 and therefore is similarly analyzed as claim 12 above and rejected under the same or similar rationale.

12. Regarding claim 16, it is the equivalent method variant of the apparatus claim 13 and therefore is similarly analyzed as claim 13 above and rejected under the same or similar rationale.

13. Regarding claim 17, Coleman in view of Lupu clearly teaches **the method as claimed in claim 14** (see above), **further comprising the step of performing image processing on a general image to be transmitted to the information processing apparatus** (see Coleman at least at FIG. 9, further described in page 13, paragraph [0171] continued at page 14 through paragraph [0177]), **the cache memory provides imaging until updateable data detected), wherein the image processing step includes stopping performing the image processing on the general image when the cursor location information is acquired from the information processing apparatus** (see Coleman FIG. 9, the image processing waits until cache is updated to resume; see page 14 paragraph [0177]), **and resuming the image processing on the general image after the cursor peripheral image is transmitted** (see Coleman, page 14 paragraph [0177], the cycle resumes with additional frames).

14. Regarding claim 18, Coleman in view of Lupu clearly teaches **the method as claimed in claim 16** (see above), **wherein the image transmitting includes detecting an image change from a difference between a first image obtained from a computer** (see Coleman, page 5 paragraph [0061] “current frame buffer”) **and a second image acquired after the first image** (see Coleman paragraph [0061] “compare frame buffer”), **and transmitting a predetermined**



**region that includes the image change of the second image with respect to the first image, to the information processing apparatus** (see Coleman, page 5, paragraph [0059] through page 6 paragraph [0065]).

15. Regarding claim 19, Coleman in view of Lupu clearly teaches **the method as claimed in claim 14** (see above), **wherein the image extracting includes extracting the cursor peripheral image at predetermined intervals** (see Schneider '418 describing the "digitizer controller application periodically requesting screen data at column 6, lines 65 to end and continued at column 7, lines 1-7).

16. Regarding claim 26, it is similarly analyzed as claim 12 above and rejected under the same or similar rationale.

17. Regarding claim 27, it is similarly analyzed as claim 13 above and rejected under the same or similar rationale.

18. Regarding claim 28, it is similarly analyzed as claim 17 above and rejected under the same or similar rationale.

19. Regarding claim 29, it is similarly analyzed as claim 18 above and rejected under the same or similar rationale.

20. Regarding claim 30, it is similarly analyzed as claim 19 above and rejected under the same or similar rationale.

21. Claims 20-23 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coleman in view of Lupu as applied to claim 14 above, and further in view of Schneider (US 6,539,418 B1) hereinafter referred to as "Schneider".

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22. Regarding claim 20, Coleman in view of Lupu clearly teaches **the method as claimed in claim 19** (see above), but do not explicitly teach **wherein the predetermined intervals are changed in accordance with a preset value transmitted from the information processing apparatus**.

23. In the same field of endeavor, Schneider clearly teaches **wherein the predetermined intervals are changed in accordance with a preset value transmitted from the information processing apparatus** (see Schneider at column 9 lines 40-end).

24. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate the predetermined interval system as taught by Schneider into the transmission system of Coleman in view of Lupu because all are within the same field of endeavor and the combination would improve user control and improve efficiency of the system (see at least Schneider at column 9, lines 40-end).

25. Regarding claim 21, Coleman in view of Lupu further in view of Schneider clearly teaches **the method as claimed in claim 19** (see above), **wherein the predetermined intervals are changed in accordance with the congestion level of the network** (see Schneider '418 at column 9 lines 40-51).

26. Regarding claim 22, Coleman in view of Lupu further in view of Schneider clearly teaches **the method as claimed in claim 14** (see above), **further comprising the step of compressing an image to be transmitted to the information processing apparatus** (see Schneider '418 at but not limited to column 17 lines 1-21).

27. Regarding claim 23, Coleman in view of Lupu further in view of Schneider clearly teaches **the method as claimed in claim 22** (see above), but does not explicitly teach **wherein**

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**the image compressing step includes changing a compression technique or a compression ratio in accordance with the congestion level of the network.**

28. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have been motivated to incorporate **a different compression technique in accordance with congestion level of the network** for the purposes of efficiently utilizing bandwidth (see Schneider '418 at column 2 lines 45-50, and the numerous compression techniques at column 16, lines 55 to end and continued at column 17, lines 1-31).

29. Regarding claim 31, it is similarly analyzed as claim 20 above and rejected under the same or similar rationale.

30. Regarding claim 32, it is similarly analyzed as claim 21 above and rejected under the same or similar rationale.

31. Regarding claim 33, it is similarly analyzed as claim 22 above and rejected under the same or similar rationale.

32. Regarding claim 34, it is similarly analyzed as claim 23 above and rejected under the same or similar rationale.

### ***Response to Arguments***

33. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new grounds of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARVESH J. NADKARNI whose telephone number is (571)270-1541. The examiner can normally be reached on 11AM-7PM EST Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sarvesh J. Nadkarni  
Examiner – Art Unit 2629

/Amare Mengistu/

Supervisory Patent Examiner, Art Unit 2629